IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for determining a location of a device by identifying an ambient ~~environmental source emitting a~~ base frequency and waveform signal emitted by an environmental source in the vicinity of the device, the method comprising the steps of:

~~a)~~ measuring the waveform signal of the source in a predetermined time-interval;

~~b)~~ estimating the emitted waveform characteristic of the measured waveform, said estimating including estimating the base frequency;

~~c) determining a number of actions based on the estimated characteristic~~comparing the estimated waveform characteristics with stored waveform characteristics associated with various locations; and

choosing the location based on said comparison.

2. (Currently Amended) A method according to claim 1, wherein ~~the determined number of actions comprises comparison of the waveform characteristic with a unique waveform characteristic with affiliated information stored in a memory~~said method further comprises the step of:

if said comparison fails to identify a stored waveform characteristic, storing said estimated waveform characteristic as associated with a new location.

3. (Cancelled).

4. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein a fast Fourier transform derives the base frequency of the estimated waveform characteristic.

5. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein undesired signals included in said measured waveform signal are ~~may be~~ suppressed.

6. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the base frequency is refined by finding a maximum in an autocorrelation function of the estimated waveform characteristic.

7. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the estimated waveform characteristic is computed by averaging a number of estimated waveform characteristics.

8. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein a phase shift is applied to the estimated waveform.

9. (Cancelled).

10. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the method allows locating a relative orientation of ~~a detector~~ the device and the environmental source by use of two or more emission detectors.

11. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the method ~~may predict~~ predicts and suppresses a specific periodic signal.

12. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the environmental source is a source emitting light.

13. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the environmental source is a source emitting sonic signals.

14. (Currently Amended) ~~A~~ The method ~~according to~~ as claimed in claim 1, wherein the environmental source is a source emitting electromagnetic signals.

15. (Currently Amended) ~~A~~ The method ~~according to~~as claimed in claim 1, wherein the environmental source is a source emitting mechanical movement signals.

16. (Currently Amended) A system for determining a location of a device by identifying an ~~environmental source emitting a~~ ambient base frequency and waveform signal emitted by an environmental source in the vicinity of the device, the system comprising ~~means for~~:

~~a)~~ means for measuring the waveform signal of the source in a predetermined time-interval;

~~b)~~ means for estimating the emitted waveform characteristic of the measured waveform, said estimating including estimating the base frequency;

~~c) determining a number of actions based on the estimated characteristic~~means for comparing the estimated waveform characteristics with stored waveform characteristics associated with various locations; and

means for outputting the associated location based on said comparison.

17. (Currently Amended) ~~A~~ The system ~~according to~~as claimed in claim 16, wherein ~~the determined number of actions comprises comparison of the waveform characteristic with a unique waveform characteristic with affiliated information stored in a memory~~said system further comprises:

means for storing said estimated waveform characteristic as associated with a new location if said comparison fails to identify a stored waveform characteristic.

18. (Cancelled).

19. (Currently Amended) A computer readable medium containing a program for making a processor carry out the method ~~of~~ as claimed in claim 1.